THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROLAND HEIDER

Appeal No. 1996-1878
Application No. 07/982,203[1]

ON BRIEF

Before KIMLIN, JOHN D. SMITH and KRATZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

---

[1] Application for patent filed November 25, 1992.

This is an appeal from the final rejection of claims 11-30, all the claims remaining in the present application.

Claim 11 is illustrative:

> 11. The method of bonding a sole to a shoe upper comprising the steps of providing on attaching surfaces of one or both of said sole and said shoe upper a layer of heat-softened adhesive composition comprising a moisture-curable polyurethane NCO-terminated prepolymer formed from about 20%/wt to about 65%/wt of a polyester polyol having a molecular weight of from about 1,500 to about 6,000, from about 10%/wt to about 70%/wt of a polypropylene glycol having a molecular weight of from about 250 to about 1,000, and from about 15%/wt to about 35%/wt of a diisocyanate, all weights being based on the weight of said composition, pressing the attaching surfaces of said sole and said shoe upper together with said adhesive composition between them, and cooling said adhesive composition to form an adhesive bond between said sole and said shoe upper.

The examiner relies upon the following references as evidence of obviousness:

König et al. (König)	4,756,785	Jul. 12, 1988
Rumon et al. (Rumon)	5,166,300	Nov. 24, 1992
Gilch et al. (Gilch) (U.K. patent application)	2,137,638	Oct. 10, 1984

Appellant's claimed invention is directed to a method of bonding a sole to a shoe upper employing a hot-melt adhesive formed from a polyester polyol, polypropylene glycol and a diisocyanate. The method comprises providing on the attaching surfaces of one or both of the sole and shoe upper a layer of the heat-softened adhesive, pressing the attaching surfaces of the sole and shoe upper together, and cooling the adhesive

composition to form the bond. According to appellant, "[t]he high green strength of the bond formed between the shoe materials is sufficiently strong to permit the shoes to be handled without a precuring step" (page 4 of principal brief). Although not recited in independent claims 11 and 22, the bond is strengthened by curing upon contact with moisture. Appellant explains that the advantage of the claimed method is that "shoes can be assembled utilizing the hot melt moisture curable adhesive by applying the holtmelt adhesive to the surfaces and joining the heated surfaces without a precuring step" (page 4 of principal brief).

Appealed claims 11-13, 15-22 and 24-30 stand rejected under 35 U.S.C. § 103 over Gilch in view of Rumon. Claims 11-30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gilch in view of König. In addition, claims 14 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gilch in view Rumon and König.

We have thoroughly reviewed the respective positions advanced by appellant and the examiner. In so doing, we find ourselves in agreement with appellant that the prior art cited by the examiner fails to establish a prima facie case of obviousness for the claimed subject matter. Accordingly, we will not sustain the examiner's rejections.

The examiner seems to appreciate that Gilch, the primary reference in all three rejections, fails to teach appellant's adhesive composition. We say this because the examiner sets forth that it is his position that:

> [I]t would have been obvious to one of ordinary skill in this art to employ the adhesive compositions documented in Rumon et al[.] and König et al[.], respectively, in the Gilch et al[.] process in place of the corresponding, analogous adhesive employed therein; mere substitution of one known moisture curable hot melt polyurethane adhesive for another involved. [Page 5 of Answer].

Indeed, the adhesive of Gilch is not formed by reacting polypropylene glycol. Rather, the adhesive of Gilch is formed by reacting a diisocyanate, a hydroxyl polyester and a monofunctional reactant, such as a primary alcohol.

However, the flaw in the examiner's reasoning is that even assuming, for the sake of argument, that the adhesive compositions of Rumon and König were the same as the adhesive compositions within the scope of the appealed claims, they would not have suggested the requisite modification to Gilch's method of bonding to arrive at the claimed method. The claims presently on appeal define a method of bonding a sole to a shoe upper that comprises the three steps of providing the heat-softened adhesive, pressing the sole and shoe upper together, and cooling the adhesive. As urged by appellant, the method of Gilch is quite different. While Gilch discloses the steps of applying the hot melt adhesive, pressing together

the sole and the shoe upper and cooling, Gilch also requires that the adhesive is subjected to moisture and heating before pressing the sole and the shoe upper together. König, for instance, applies components of the adhesive composition with a two-component spraying apparatus, and passes the coated sheet through a drying channel to form an adhesive-coated sheet that is dry to the touch (column 4, lines 50 et seq. and column 5, lines 18 et seq.). As for Rumon, we agree with appellant that the referenced disclosure would not have suggested a modification of the Gilch method for bonding a sole to a shoe upper, since Rumon purposefully formulates a high viscosity adhesive composition which does not diffuse through adjacent layers of fabric and the like (column 2, lines 38 et seq.). Furthermore, insofar as the examiner concedes that the adhesive compositions of Rumon and König are not the same as Gilch's adhesive composition, it is incumbent upon the examiner to establish why it would have been obvious for one of ordinary skill in the art to modify the method of Gilch in light of the disclosures of Rumon and König. We have not ignored the examiner's statement at page 6 of the Answer that the appealed claims do not preclude the presence of additional steps by virtue of the "comprising" language, but it is not proper to read into the claims specific steps that are not disclosed or suggested in the supporting specification

which would undermine one of the basic objects of the invention. In the present case, reading the additional steps of exposing the adhesive to moisture and heating before pressing the sole and upper shoe together would defeat appellant's purpose of bonding the sole and upper shoe together with sufficient green strength without the employment of a curing step.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN Administrative Patent Judge	)	
JOHN D. SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
PETER F. KRATZ Administrative Patent Judge	)	

ECK:clm

Henkel Corp.
Patent Dept.
2500 Renaissance Blvd., Ste. 200
Gulph Mills, PA 19406